

PLASMA PROCESSING APPARATUS AND CONTROL METHOD

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ABSTRACT OF THE DISCLOSURE

A detector detects microwaves reflected from a processing chamber. Based on the reflected microwaves, a load impedance is calculated. An amount of adjustment required to match the load impedance with an impedance of a microwave oscillator is calculated. The calculated amount of adjustment multiplied by a predetermined value smaller than 1 is transmitted as an adjustment signal. A load matching device is repeatedly controlled based on the adjustment signal. Consequently, the load impedance gradually approaches the impedance of the oscillator. Eventually, an impedance match is attained.